s Docket No.: 09464-009001

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Andrew Burstein et al.

Art Unit

: 2838

Sérial No.:

09/498,297

Examiner: Rajnikant Patel

: February 4, 2000

A FLIP-CHIP SWITCHING REGULATOR

Commissioner for Patents Washington, D.C. 20231

**RESPONSE** 

C 2800 MAIL In response to the action mailed July 28, 2000, please amend the application as follows

In the Claims:

Please cancel claim 5 and 45.

1. (Amended) A voltage regulator having an input terminal and an output terminal, comprising:

- a printed circuit board;
- a substrate mounted on the printed circuit board;
- a first flip-chip type integrated circuit chip mounted on the substrate, the first integrated circuit chip including a first power switch fabricated therein to alternately couple and decouple the input terminal to the output terminal, wherein the flip-chip type integrated circuit chip includes a p-type region and an n-type region, and the first power switch includes a plurality of p+ regions fabricated in the n-type region in a first array, and a plurality of n+ regions fabricated in the p-type region in a second array, and wherein alternating p+ regions are connected to the input terminal and to an intermediate terminal, and alternating n+ regions chip are connected to the intermediate terminal and to ground;
  - a filter disposed to provide a substantially DC voltage at the output terminal; and
- a control circuit to control the power switch to maintain the DC voltage substantially constant.

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

hereby certify under 37 CFR §1.8(a) that this correspondence is being. deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

Date of Deposit

Signature